



High Winds, Snow, & Cold Impacts

January 3, 2022

5:07 PM

Now through Thursday Morning

Overview

→ High Wind Warnings:

- ◆ Now for Wind Prone areas and then expanding overnight & Tuesday morning through 5 PM Tuesday
- ◆ Likely wind gusts up to 60 to 75 mph

→ High Wind Watches:

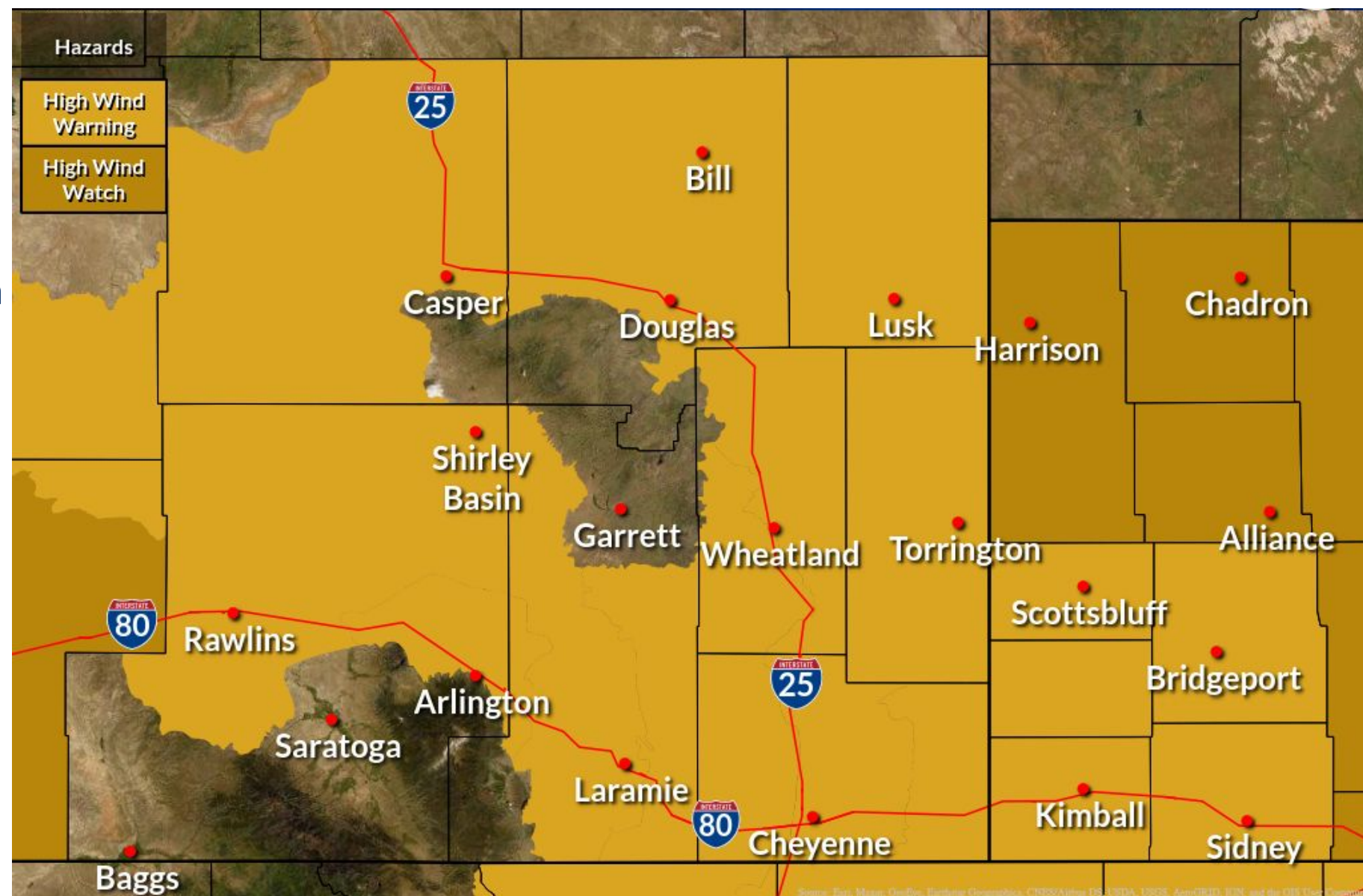
- ◆ North Nebraska Panhandle:
 - Tuesday 9 AM - 5 PM
 - Possible wind gusts up to 60 65 mph

• Main Wind Hazard Update:

Numerous High Wind Warnings upgraded for Tuesday from previous High Wind Watch.

Next Scheduled Briefing

→ Tuesday Afternoon



High Wind Warnings & Watches, & Winter Storm Watches



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Cheyenne, Wyoming



Maximum Wind Gust Forecast

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Winds already High West - Increase further this morning through late afternoon East

Key High Wind Message:

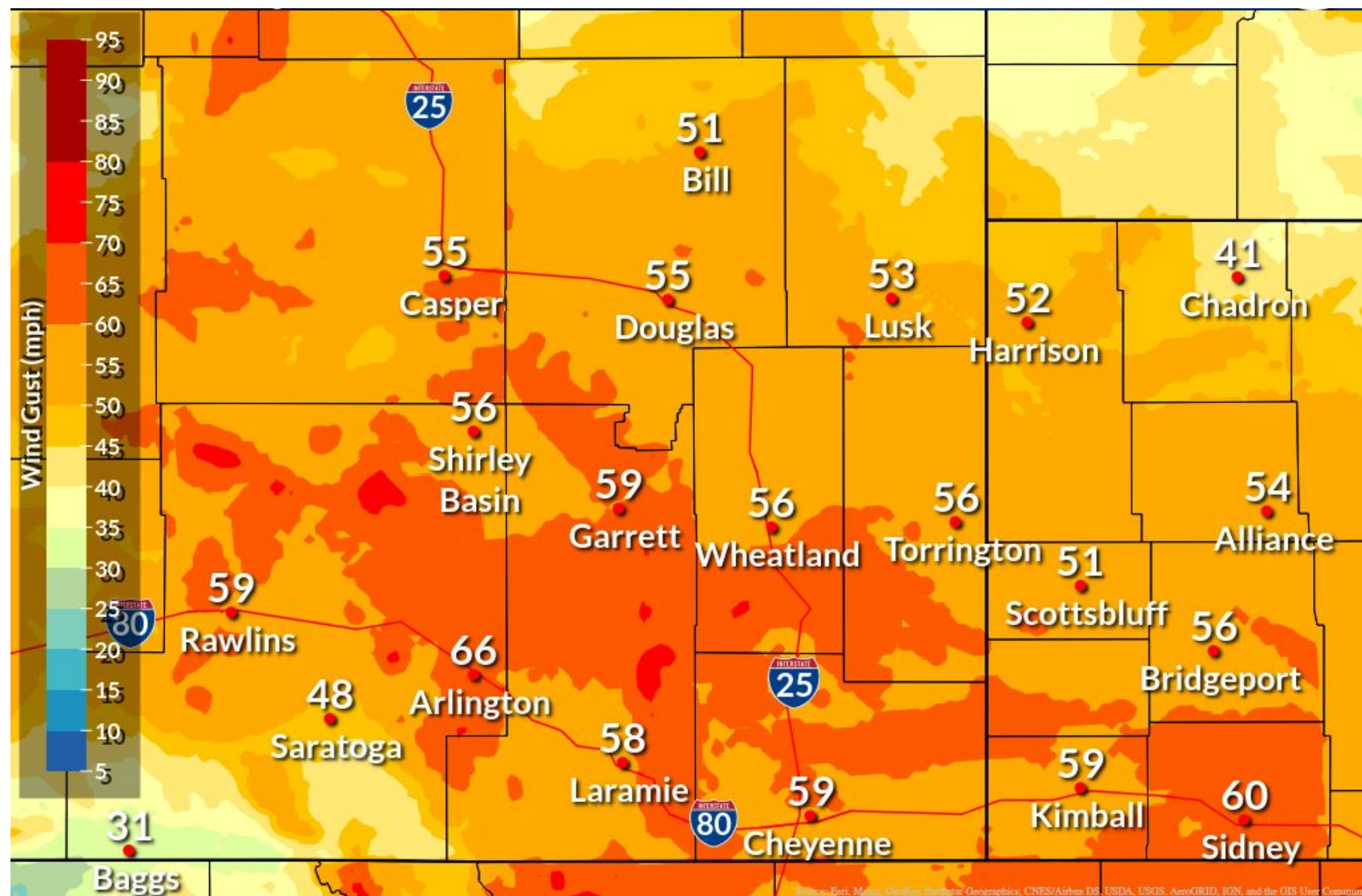
→ Wyoming:

- ◆ Wind-prone areas and ridge tops: Sustained winds 40 to 50 mph with gusts 70 to 80 mph.
- ◆ Elsewhere: sustained winds 30 to 40 mph with gusts 60 to 65 mph.

- Nebraska: Sustained winds 30 to 40 mph with gusts 60 to 70 mph.
- Likely areas of blowing snow west of the Laramie Range.
- Refer to following slides for timing.



***Be cautious if traveling
with light weight, high
profile vehicles.***



Maximum Wind Gust Forecast Tuesday





High Wind Impact Timeline - Wyoming

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Graphical Hazards Matrix

	Tue 3 AM-6 AM	Tue 6 AM-9 AM	Tue 9 AM-12 PM	Tue 12 PM-3 PM	Tue 3 PM-6 PM
Cheyenne					
Laramie					
Rawlins					
Wheatland					
Arlington					

- About This Graphic -

The hazard matrix depicts timing and magnitude of potential impacts from high winds which could lead to adverse impacts for light, high-profile vehicles and property.

Please give extra space to large vehicles or dial 511 for the latest road condition information.

Impact Level	Little/None	Limited	Elevated	Significant	Extreme
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High Wind Impact Timeline - Nebraska

January 3, 2022
5:07 PM

Graphical Hazards Matrix

	Tue 3 AM-6 AM	Tue 6 AM-9 AM	Tue 9 AM-12 PM	Tue 12 PM-3 PM	Tue 3 PM-6 PM
Scottsbluff					
Alliance					
Sidney					
Kimball					
Chadron					

- About This Graphic -

The hazard matrix depicts timing and magnitude of potential impacts from high winds which could lead to adverse impacts for light, high-profile vehicles and property.

Please give extra space to large vehicles or dial 511 for the latest road condition information.

Impact Level	Little/None	Limited	Elevated	Significant	Extreme
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Next Round of Impactful Snow

January 3, 2022

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Mid-day Tuesday - Early Thursday with heaviest amounts Wednesday

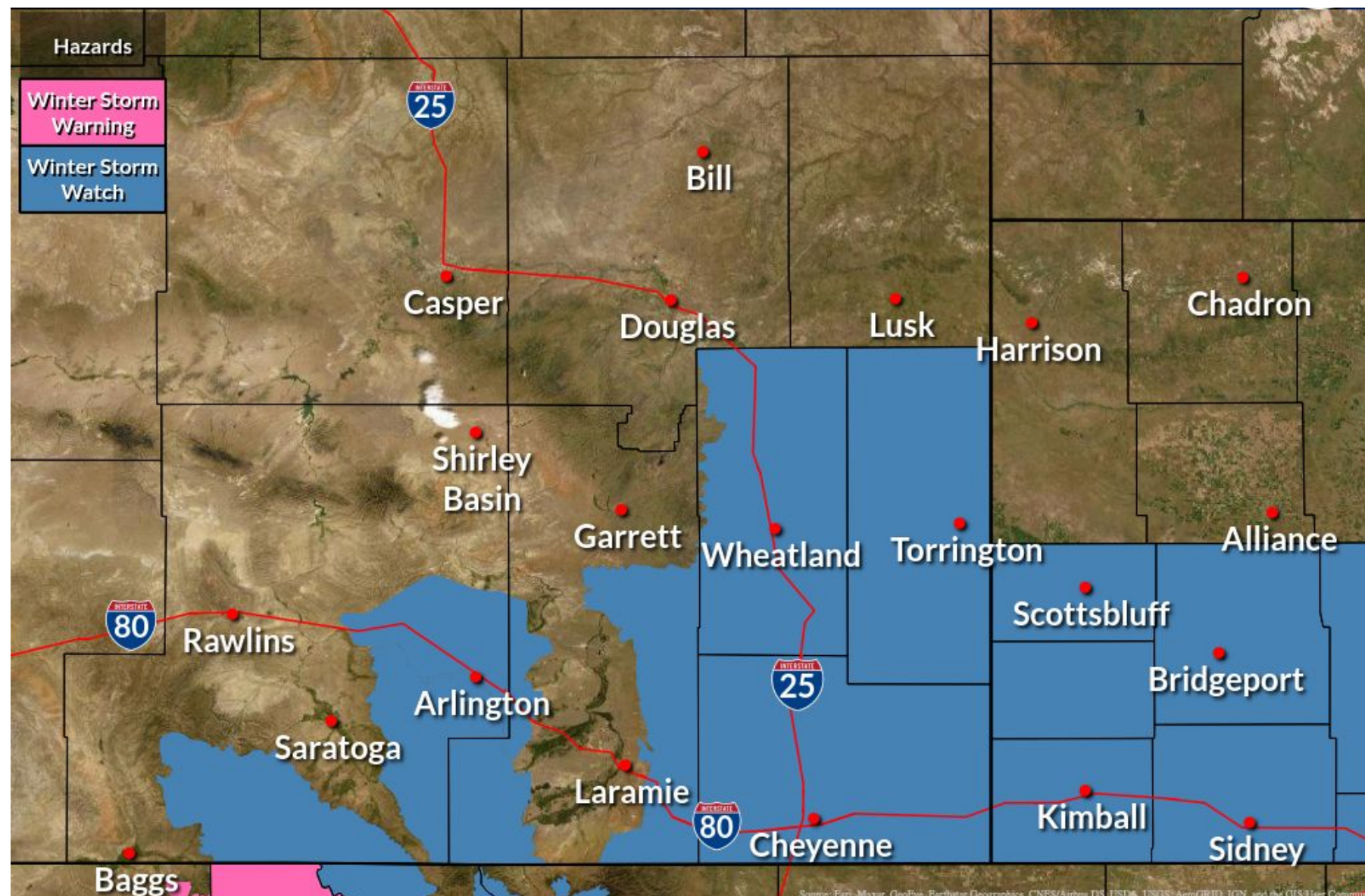
Overview

→ Winter Storm Watches:

- ◆ Valid from 11am Tuesday to 11am Thursday for Snowys and Sierra Madres.
- ◆ Valid from 8am Wednesday to 11am Thursday for the I-80 Summit, High Plains of Wyoming, and central/southern Nebraska Panhandle.

• Main Winter Storm Hazard

Update: Winter Storm Watch was expanded across portions on the Wyoming High Plains and into central and southern Nebraska on this update.



Winter Storm Watches across WY & NE



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Cheyenne, Wyoming



Snowfall Amount Chances

January 3, 2022
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Tuesday Afternoon through Wednesday Night

Winter Storm Watch Details



11 AM Tuesday to 11 AM Thursday for
Snowy and Sierra Madre Mountains
8am Wednesday to 11am Thursday for
Summit and High Plains of WY/NE

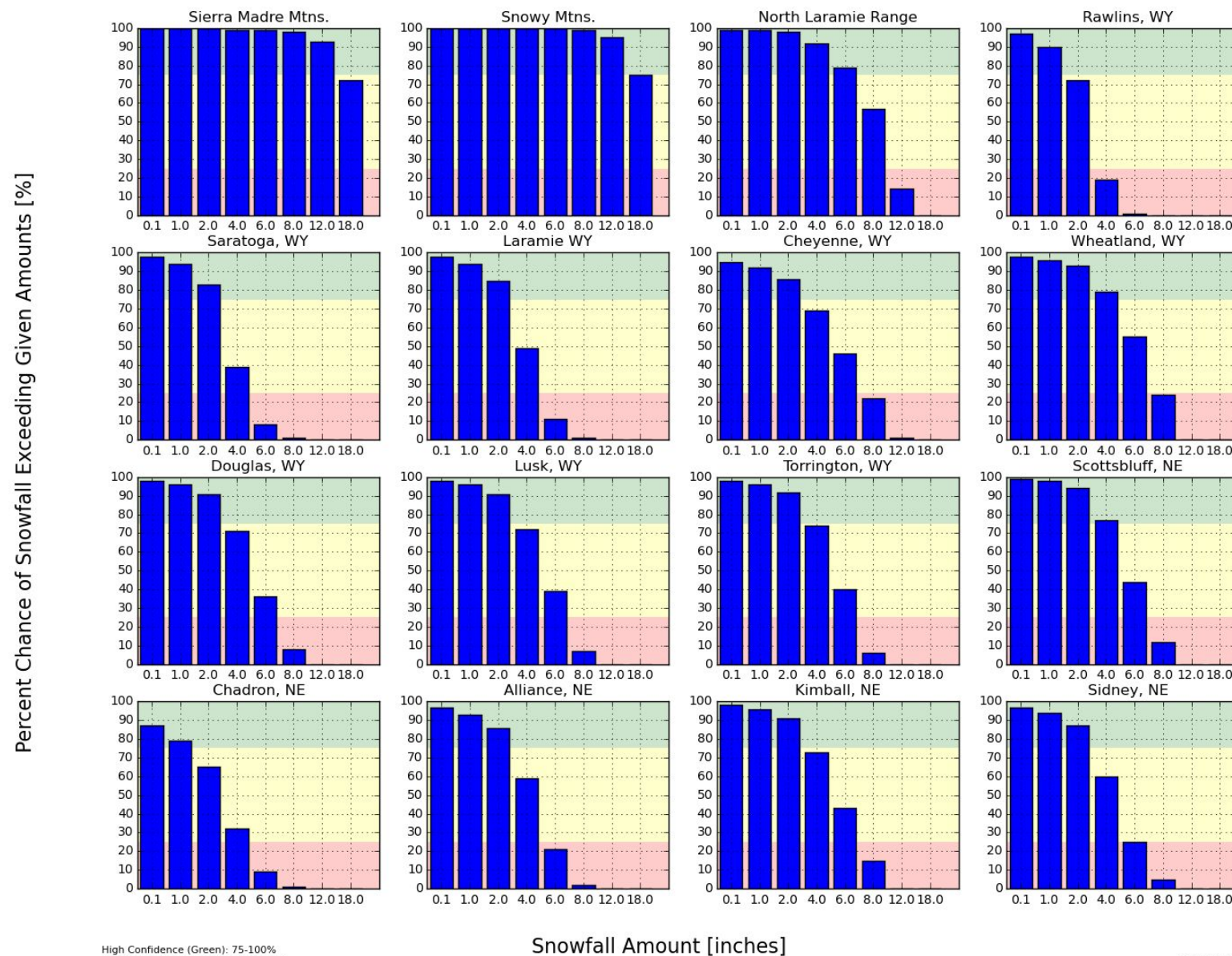


Heavy snow and blowing snow could
cause campers and recreationists to
become lost or disoriented in the
mountains.

Quick Forecast

- 1 to 2 feet of snowfall possible in Snowy & Sierra Madre Mountains
- See graphic on right for percent chances of snowfall amounts for select cities Tuesday night through Thursday morning.

Snowfall Probability for 05 Jan 2022 00 UTC through 06 Jan 2022 18 UTC



ProbSnow Run: 202201032130
Created: 01/03/2022 2142 UTC



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Most Likely Forecast Snowfall

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Forecast Confidence Levels

Snow Amounts

Low

Medium

High

Timing

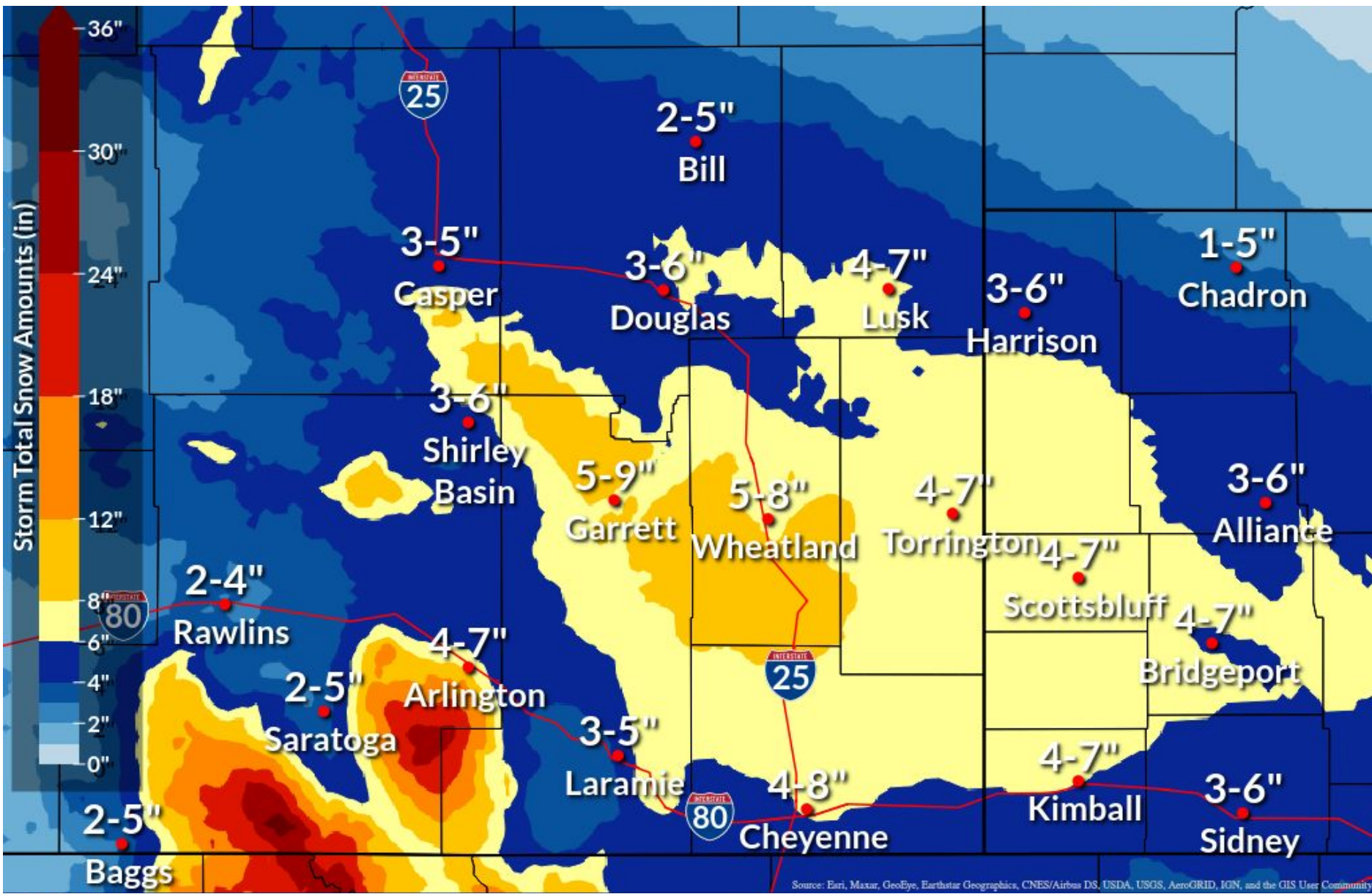
Low

Medium

High

Key Snow Points:

- Snow will begin across the mountains Tuesday morning with increasing rates throughout the day Tuesday.
- Snow will spread east of the Laramie Range, including the High Plains, by Wednesday morning, ending by early Thursday morning.
- The heaviest snow will likely be Wednesday afternoon.



Forecast Snow Totals Tuesday - Wednesday



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Very Cold Wind Chills

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Wind Chills Plummet Wednesday Night into Thursday Morning

Wind Chill Details



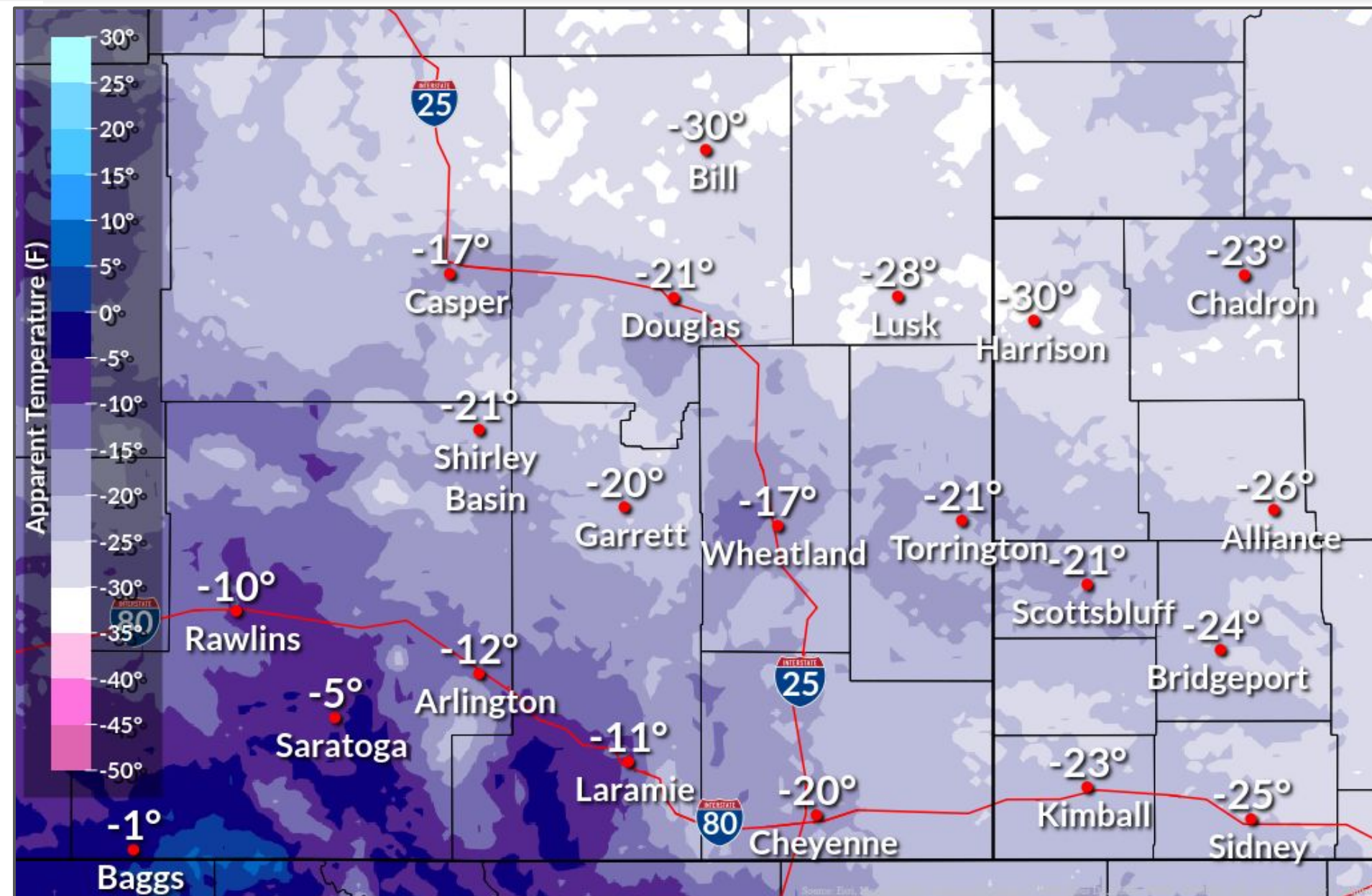
Wednesday Night - Thursday Morning



Very low wind chills behind an arctic cold front Wednesday night through Thursday morning.

Quick Forecast

- West of the Laramie Range: Wind chills -9 to -25 degrees.
- East of the Laramie Range: Wind chills -18 to -30 degrees.
- Avoid long periods outdoors due to risk of frostbite. Wear warm layers. Be sure to care for livestock appropriately.



Wind Chills Wednesday Night - Thursday Morning



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